Liverpool John Moores University

Title:	ADVANCED MULTIMEDIA DEVELOPMENT
Status:	Definitive
Code:	**6043COMP** (117455)
Version Start Date:	01-08-2018

Owning School/Faculty:	Computer Science
Teaching School/Faculty:	Computer Science

Team	Leader
Yuanyuan Shen	Y
Mike Baskett	

Academic Level:	FHEQ6	**Credit Value:**	24	**Total Delivered Hours:**	72
Total Learning Hours:	240	**Private Study:**	168		

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24
Workshop	48

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Individual essay writing on Advanced Multimedia Development. Students will write an essay on topics relating to the module, based on assigned readings.	40	
Technology	AS2	Group work with peer assessment that covers design and development an interactive multimedia application.	60	

Aims

To develop a theoretical knowledge of the concepts and techniques required for the design, development and evaluation of interactive and engaging multimedia applications such as Rich Internet Applications and Serious Games.
To provide an opportunity to practice design and test the user experience of interactive multimedia applications.
To enable students to design an interactive multimedia, architect a software solution and develop the interactive multimedia application.

Learning Outcomes

After completing the module the student should be able to:

1	Discuss key concepts and techniques used in the design of interactive multimedia applications such as rich internet applications and serious games.
2	Explain the importance of user experience for an interactive multimedia application.
3	Design and develop an interactive multimedia application with user experience considerations.
4	Explain and apply the techniques involved in the implementation of an interactive multimedia application.
5	Critically evaluate the techniques and challenges behind the design and development of an interactive multimedia application.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Adv Multimedia Dev   1   2

Design and development   3   4   5

Outline Syllabus

Rich internet applications: concepts and definitions, modelling approaches, technologies.
User experience: concepts, lifecycle and benefit of UX, tools of UX (e.g. user testing, expert review, persona and etc.).
Serious Games: terminologies and taxonomy, applications of serious games, issues and challenges, guidelines and principles of serious games design.
Architecting interactive multimedia solution: information architecture design, dynamic content, data storage, technology integration, application optimization, security and etc.
Advance multimedia scripting: media scripting, interaction scripting, real-time animation scripting, data processing and visualization scripting.

Learning Activities

Formal lectures and seminars will deliver theoretical concepts while practical-based

workshop sessions, which take place in computer laboratories, will be used to introduce specific techniques and methods used in the development of advance multimedia applications.

Notes

This module broadens the awareness of the design and development of interactive multimedia applications such as Rich Internet Applications and Serious Games with user experience design emphasis.